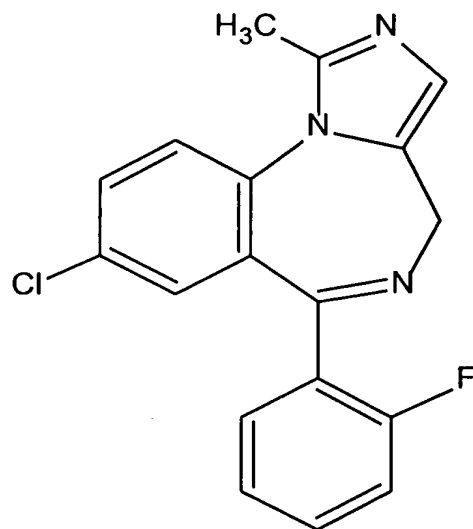
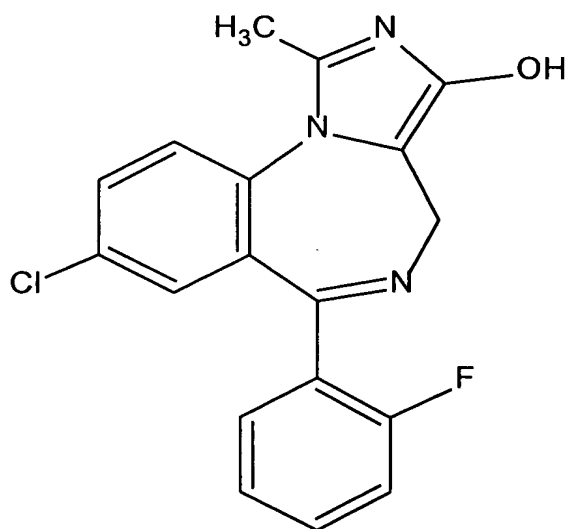


CYP3A4

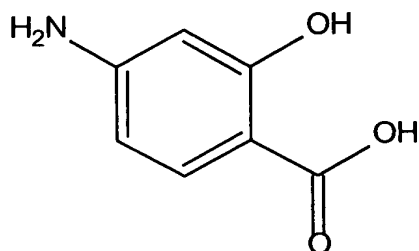


MDZ (Midazolam)

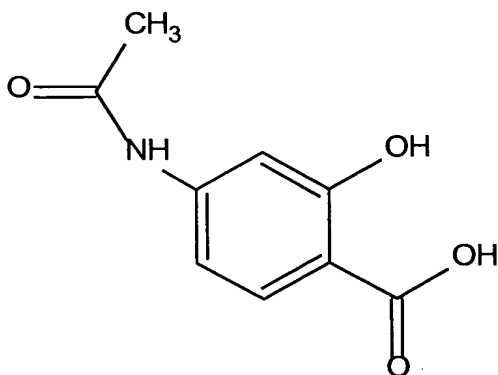


1-OH-MDZ (1-Hydroxymidazolam)

NAT1



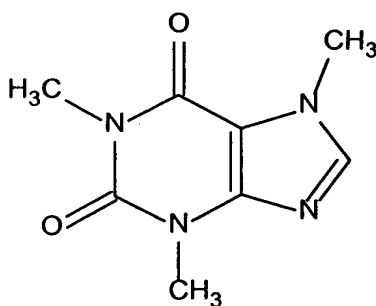
p-ASA (p-aminosalicylic acid)



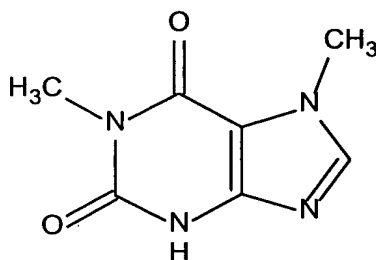
Acetyl-pASA (acetyl-p-aminosalicylic acid)

FIG. 2

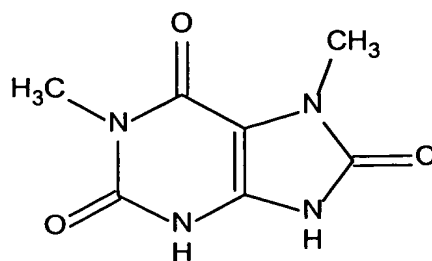
CYP1A2



Caffeine (1,3,7-trimethylxanthine)



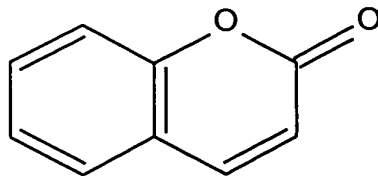
1,7-DMX (1,7-dimethylxanthine)



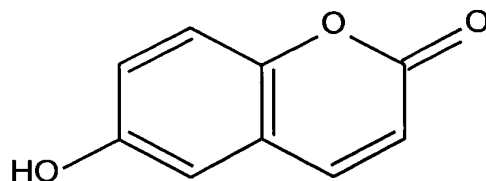
1,7-DMU (1,7-dimethyluracil)

FIG. 3

CYP2A6



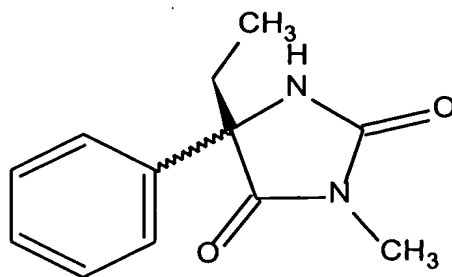
Coumarin



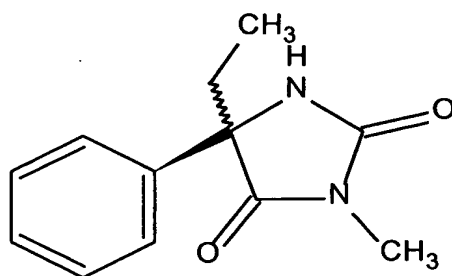
7-Hydroxycoumarin

FIG. 4

CYP2C19



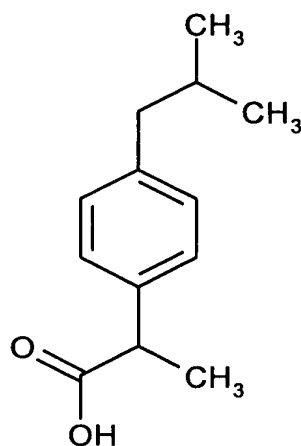
R-(-)-Mephénytoin



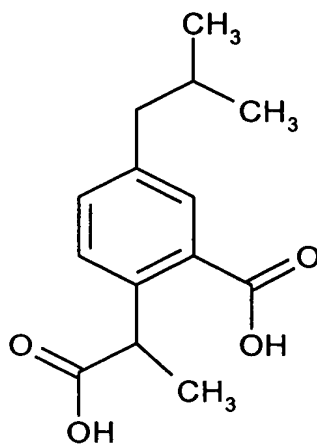
S-(+)-Mephénytoin

FIG. 5

CYP2C9



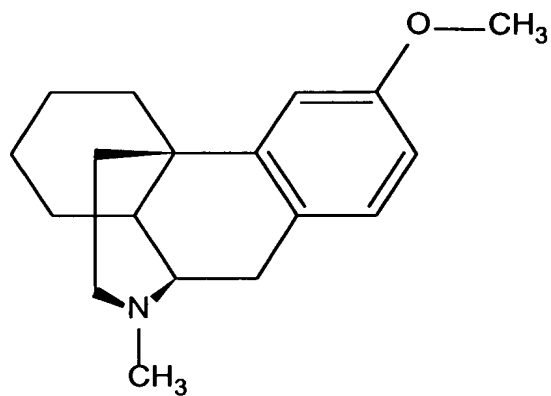
(s) -Ibuprofen



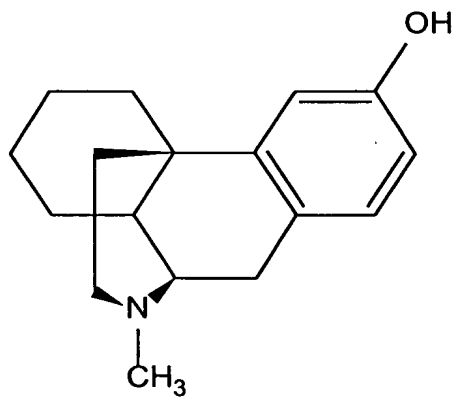
2-carboxyibuprofen

FIG. 6

CYP2D6



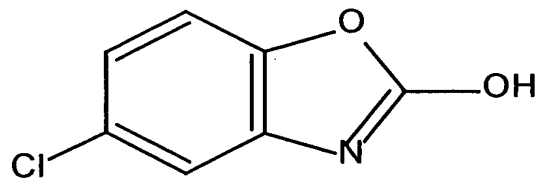
Dextromethorphan



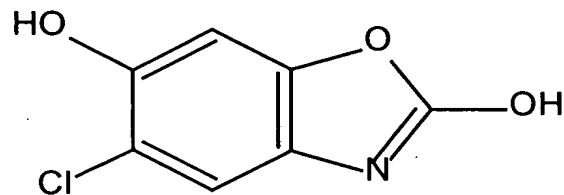
Dextrophan

FIG. 7

CYP2E1



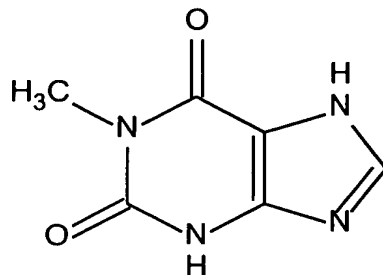
Clorzoxazone



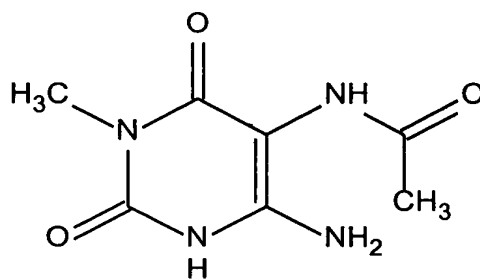
6-Hydroxychlorzoxazone

FIG. 8

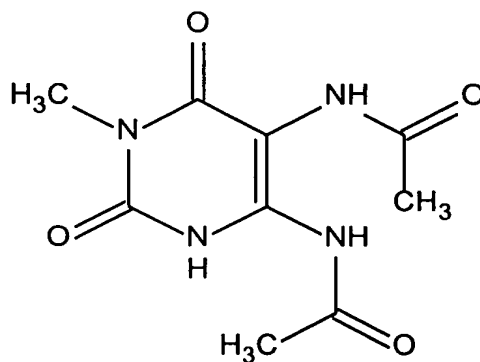
NAT2



1X (1-methylxanthine)



AAMU (5-acetamido-6-amino-methyluracil)



AFMU (5-acetamido-6-formylamino-methyluracil)

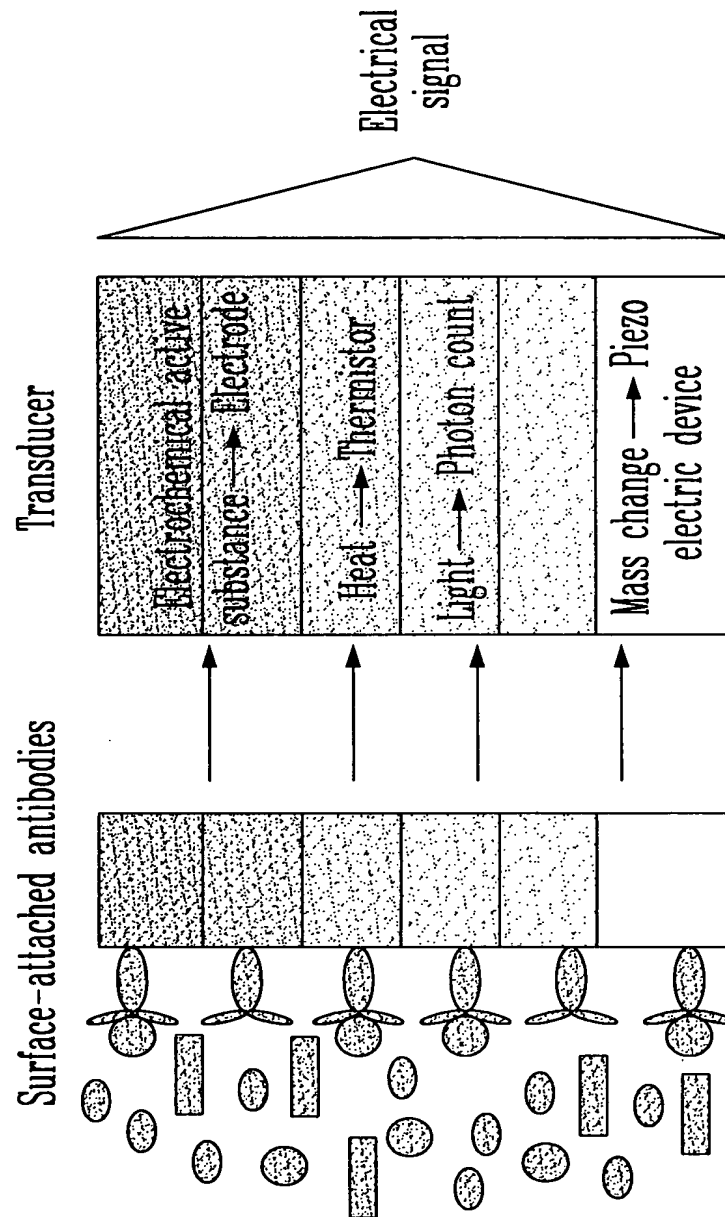


FIG. 10

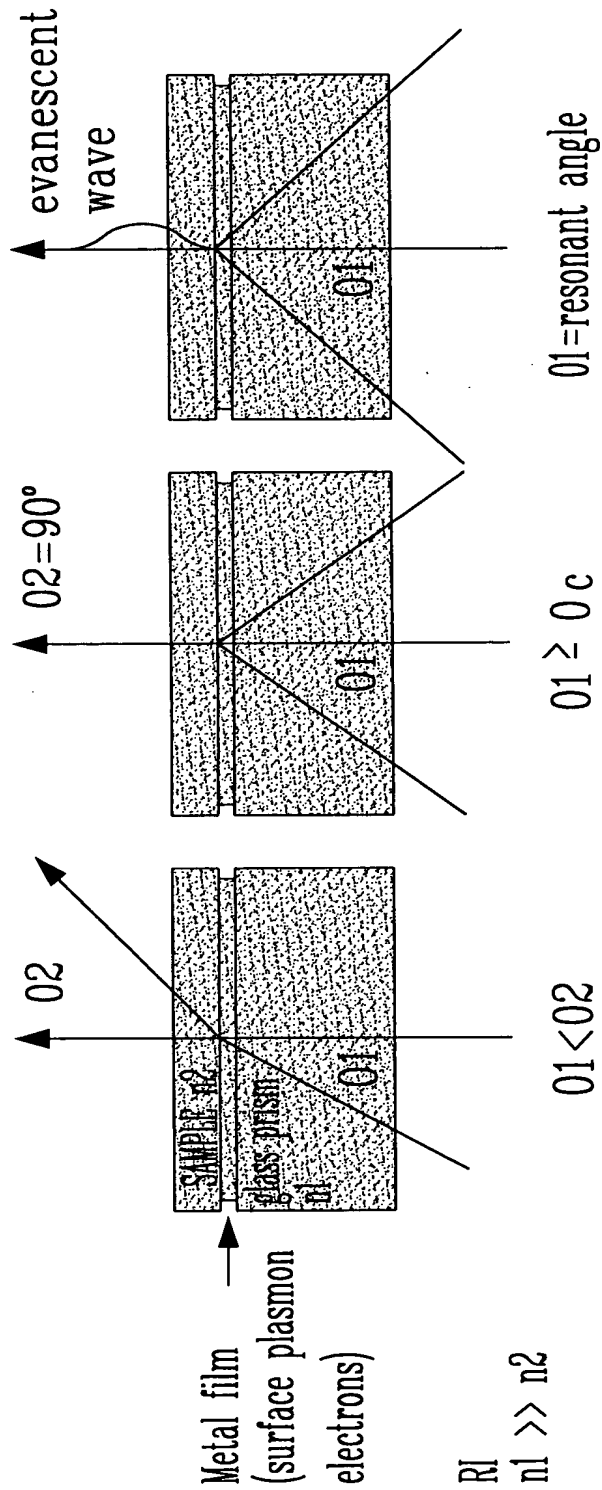


FIG. 11

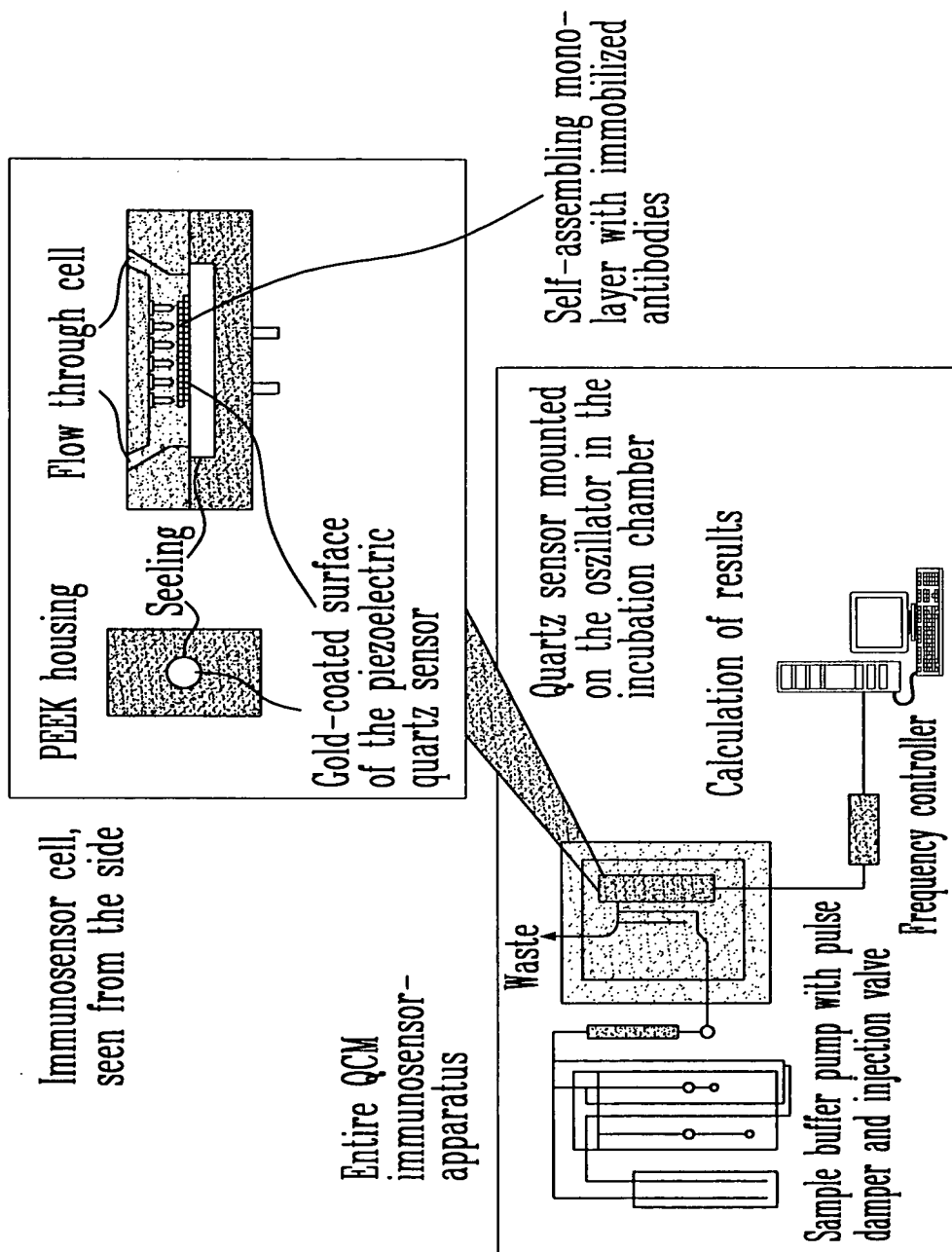
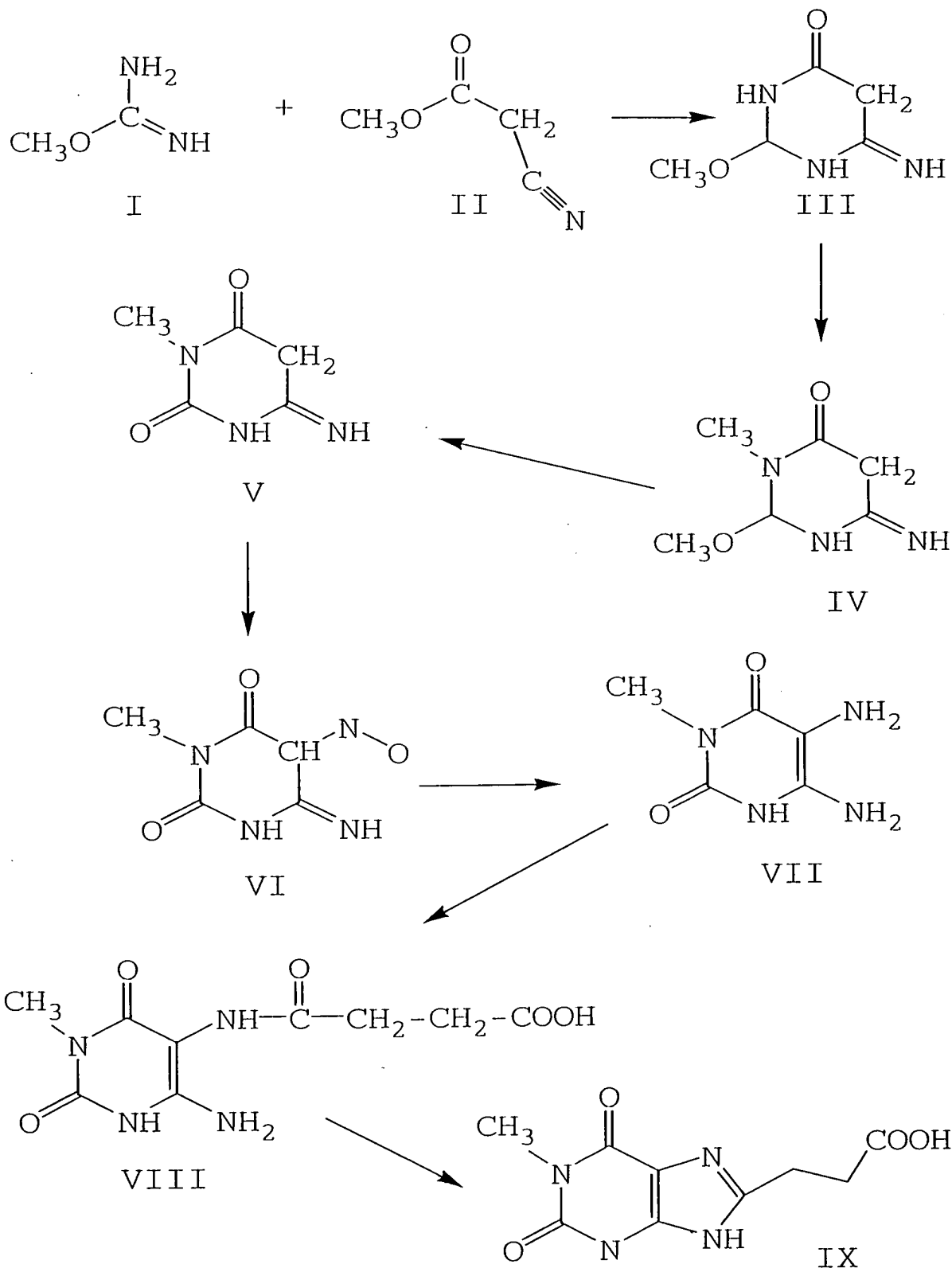


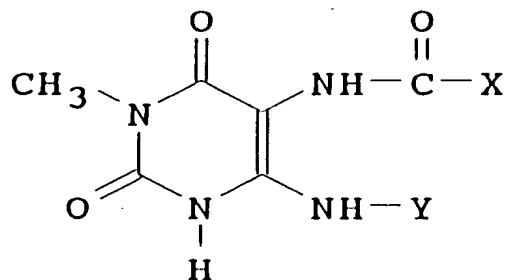
FIG. 12



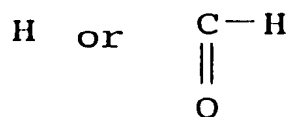
AAMU-hemisuccinic acid

1 methyl xanthine-8-propionic acid

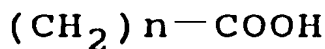
Derivatives of AAMU (5-acetamino-6-amino-3-methyluracil) or
 AFMU (5-acetamino-6-formylamino-3-methyluracil)



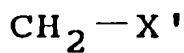
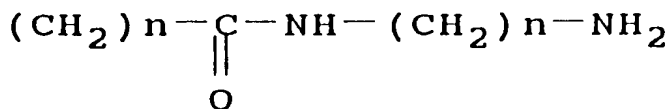
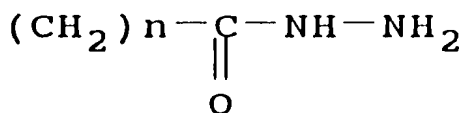
Where Y is



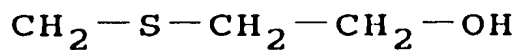
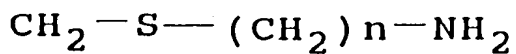
X



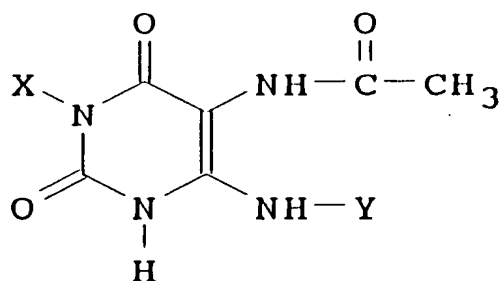
where n = 2, 3 or 4



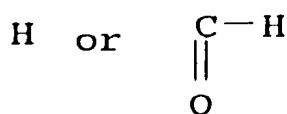
where X' is I, Br, or Cl



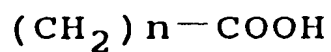
Derivatives of AAMU (5-acetamino-6-amino-3-methyluracil) or
AFMU (5-acetamino-6-formylamino-3-methyluracil)



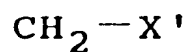
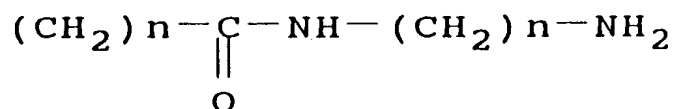
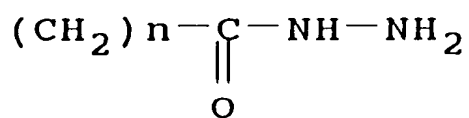
Where Y is



X



where n = 2, 3 or 4



where X' is I, Br, or Cl

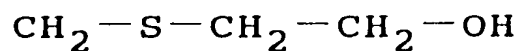
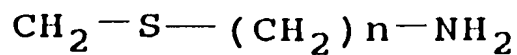
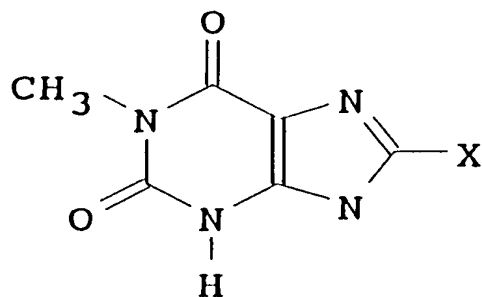
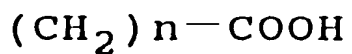


FIG. 15

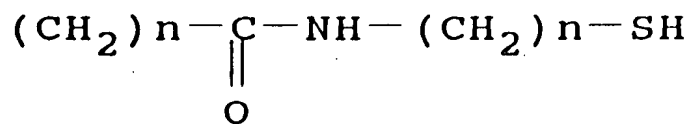
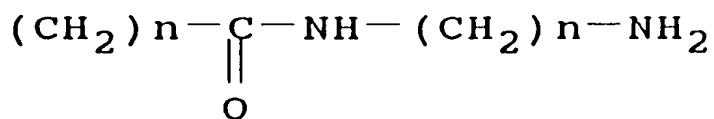
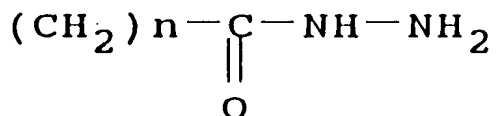
Derivatives of 1X (methylxanthine)



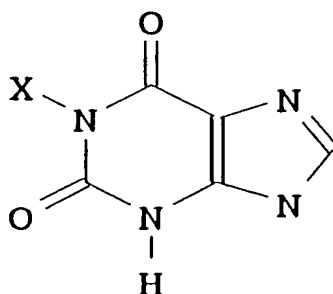
X



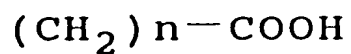
where n = 2, 3 or 4



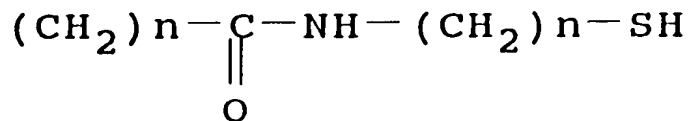
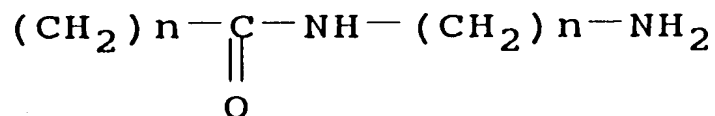
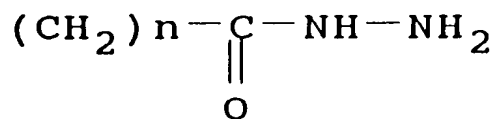
Derivatives of 1X (methylxanthine)

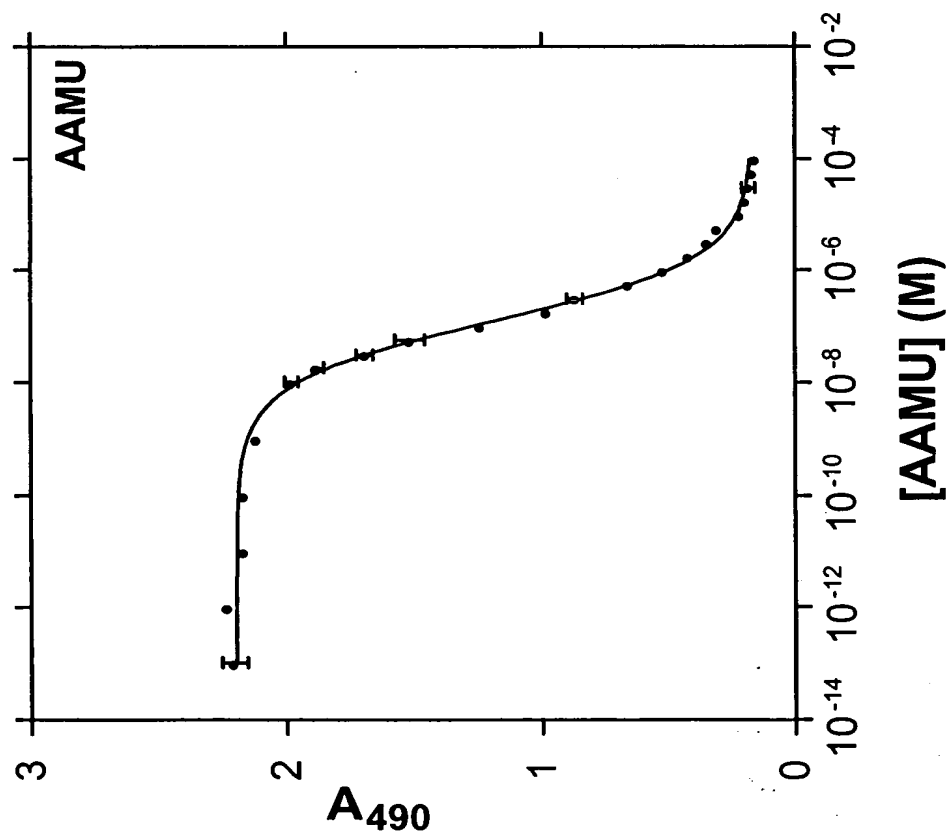
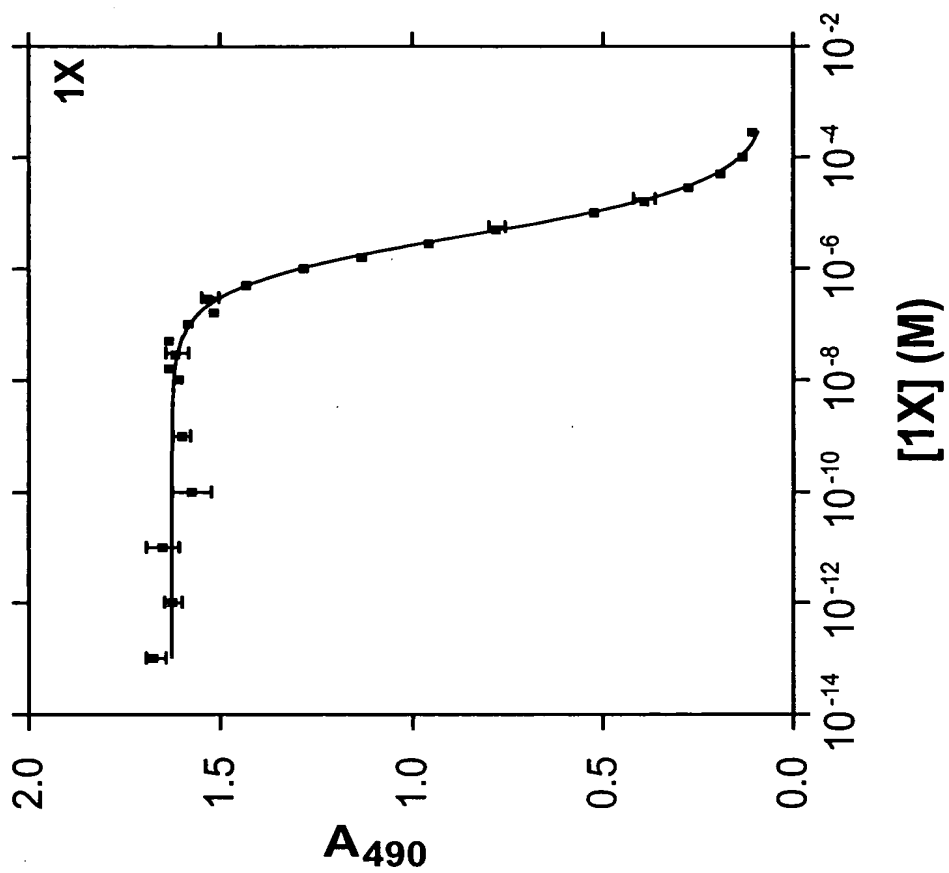


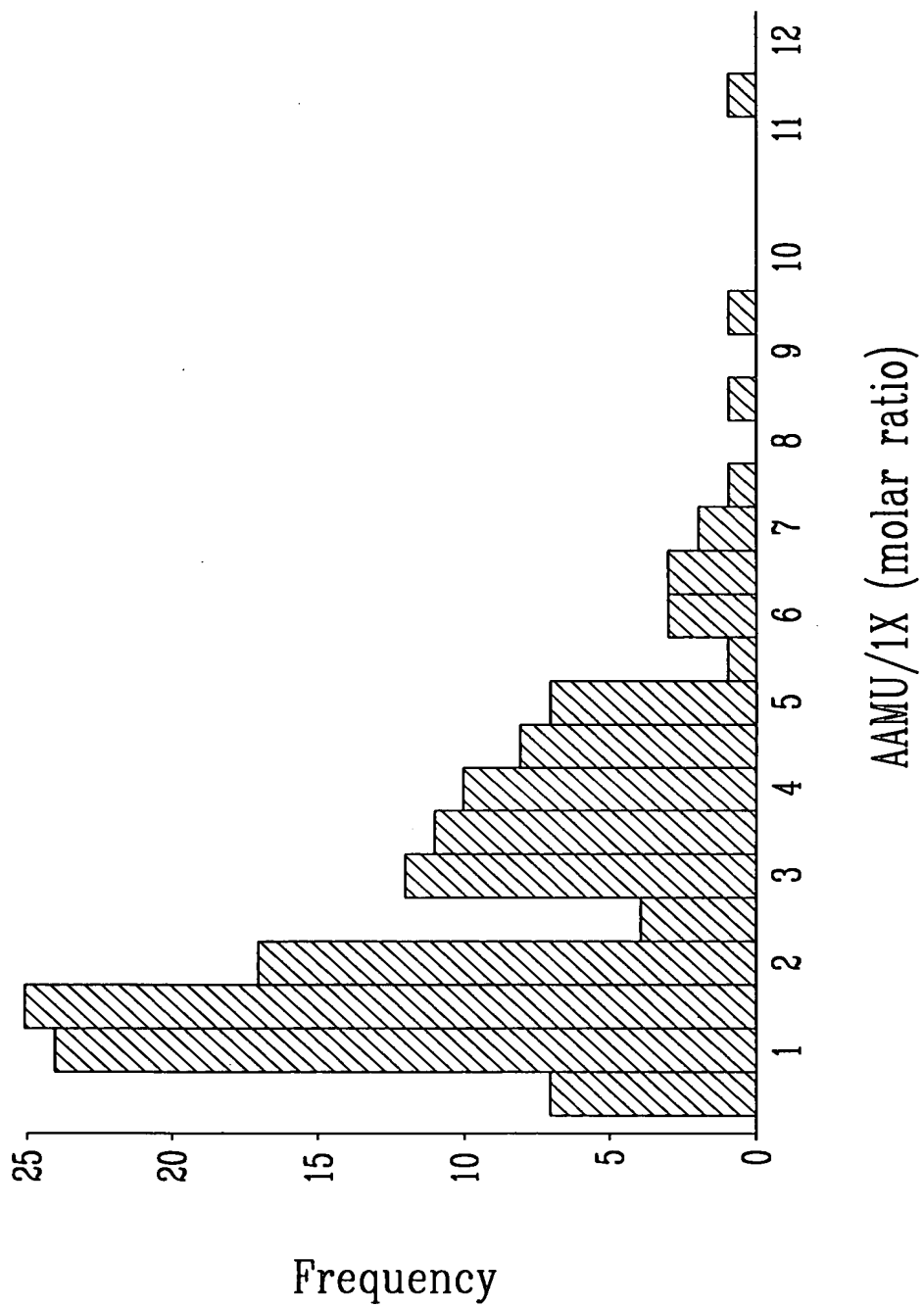
X

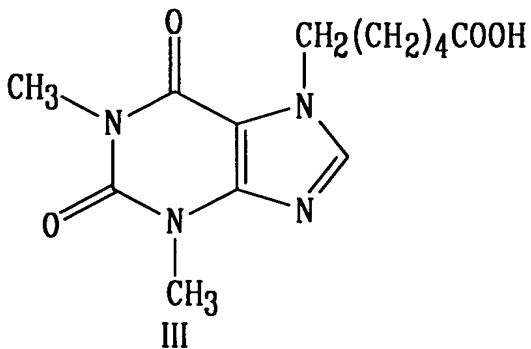
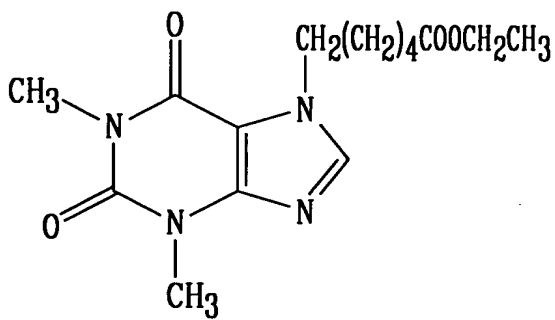
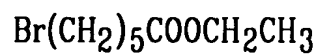
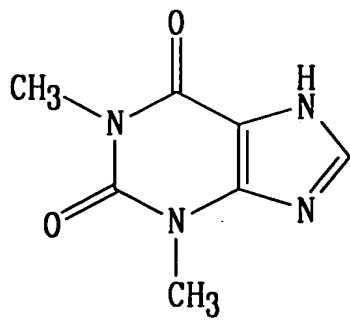


where n = 2, 3 or 4

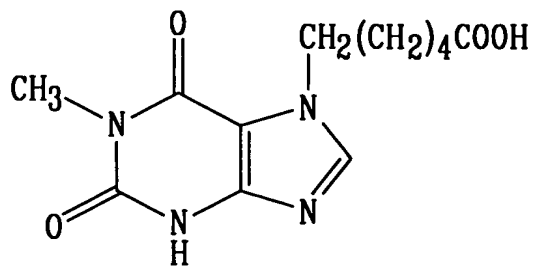
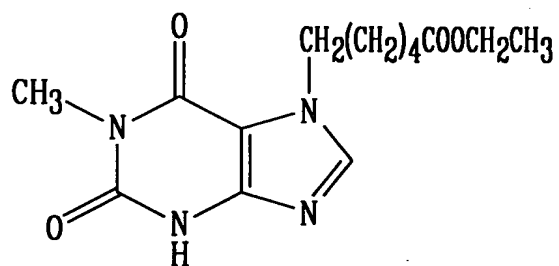
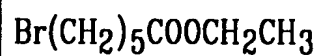
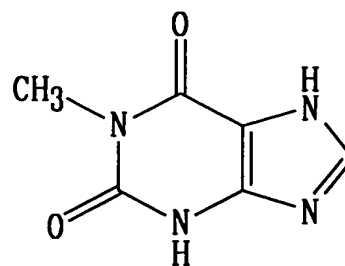






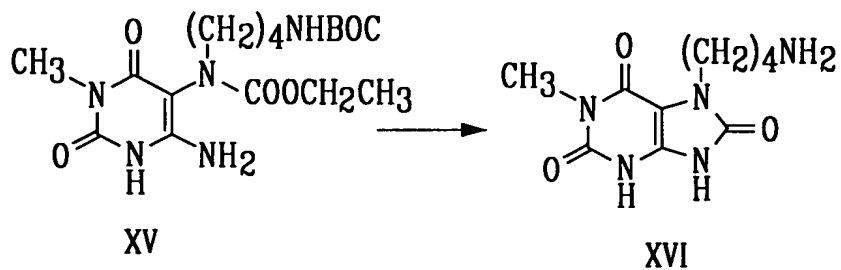
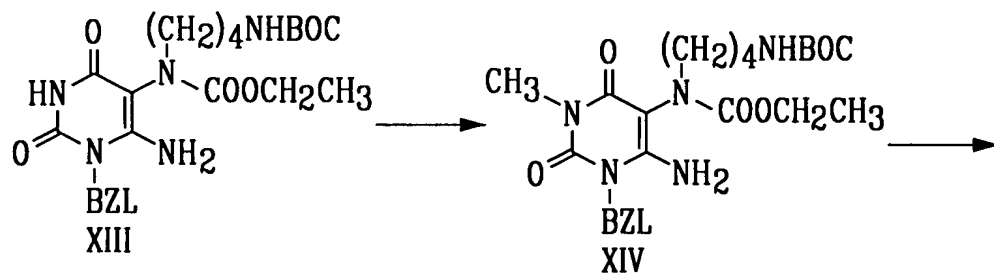
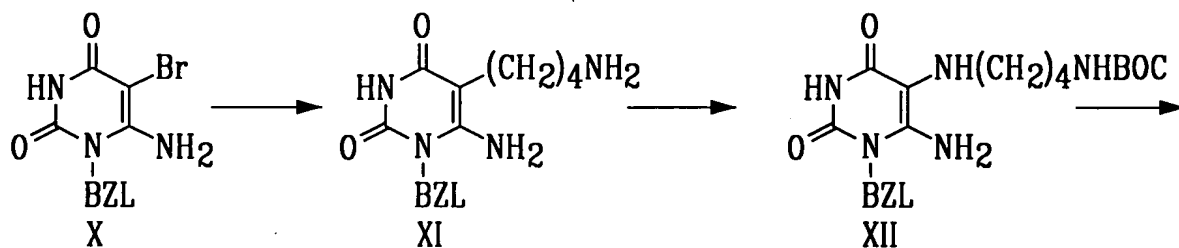
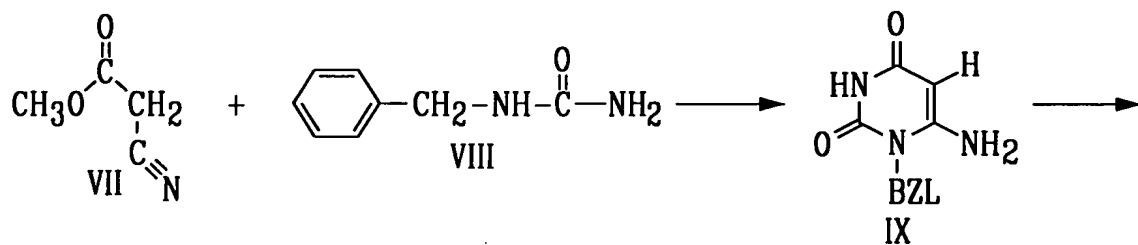


Caffeine derivative



VI

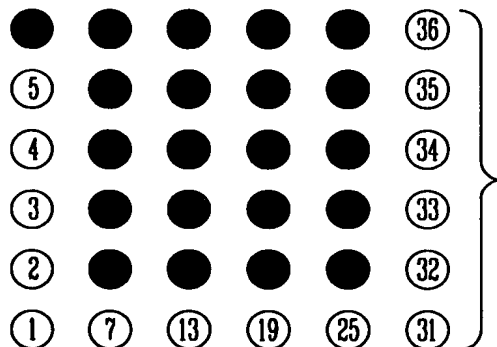
1,7-dimethylxanthine derivative



1,7-dimethyluric acid derivative

	1	2	3	4	5	6	7	8	9	10	11	12
A	Blk	STD8	STD16	S1	S9	S5	S1	S9	S5	Blk	STD8	STD16
B	STD1	STD9	STD17	S2	S10	S6	S2	S10	S6	STD1	STD9	STD17
C	STD2	STD10	STD18	S3	S11	S7	S3	S11	S7	STD2	STD10	STD18
D	STD3	STD11	STD19	S4	S12	S8	S4	S12	S8	STD3	STD11	STD19
E	STD4	STD12	STD20	S5	S1	S9	S5	S1	S9	STD4	STD12	STD20
F	STD5	STD13	STD21	S6	S2	S10	S6	S2	S10	STD5	STD13	STD21
G	STD6	STD14	STD22	S7	S3	S11	S7	S3	S11	STD6	STD14	STD22
H	STD7	STD15	STD23	S8	S4	S12	S8	S4	S12	STD7	STD15	STD23

6X6 ARRAY



ARRAY LAYOUT:

ALIGNMENT MARKERS ○

BUFFER BLANKS ○

ANTIGENS ●

ANTIGEN KEY:

1. BIOTINYLATED BSA MARKER
- 2-6. BUFFER BLANKS
7. NAT2: AAMU
8. BIOTINYLATED BSA MARKER
9. NAT2: 1X
10. NAT1: pASA
11. NAT1: ACETYL-pASA
12. CYP1A2: CAFFEINE
13. BIOTINYLATED BSA MARKER
14. CYP1A2: 1,7-DMX
15. CYP1A2: 1,7-DMU
16. CYP2A6: COMARIN
17. CYP2A6: 7-HYDROXYCOUMARIN
18. CYP2C19: R- (-) -MEPHENYTOIN
19. BIOTINYLATED BSA MARKER
20. CYP2C19: S- (+) -MEPHENYTOIN
21. CYP2C9: DICLOFENAC
22. CYP2C9: 4-HYDROXYDICLOFENAC
23. CYP2D6: DEXTROMETHORPHAN
24. CYP2D6: DEXTROPHAN
25. BIOTINYLATED BSA MARKER
26. CYP2E1: CHLORZOXAZONE
27. CYP2E1: 6-HYDROXYCHLORZOXAZONE
28. CYP3A4: MIDAZOLAM
29. CYP3A4: 1-HYDROXYMIDAZOLAM
30. BUFFER BLANK
- 31-36. BIOTINYLATED BSA MARKER

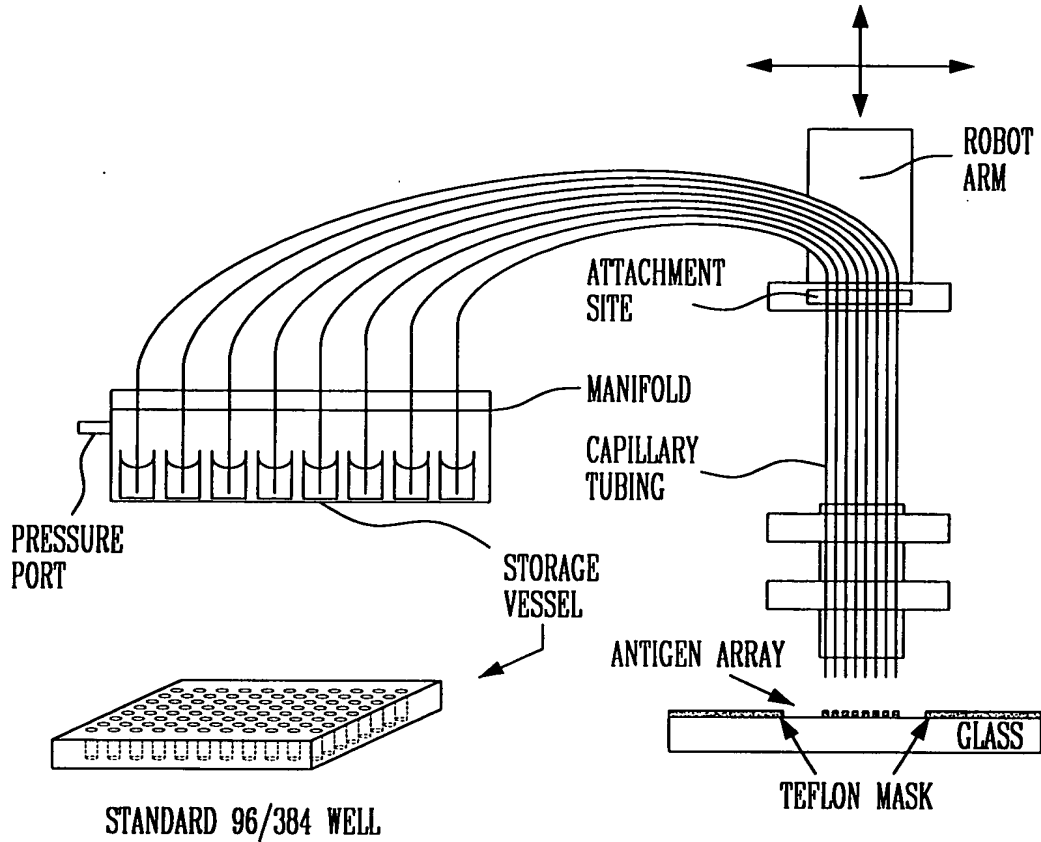


FIG. 25

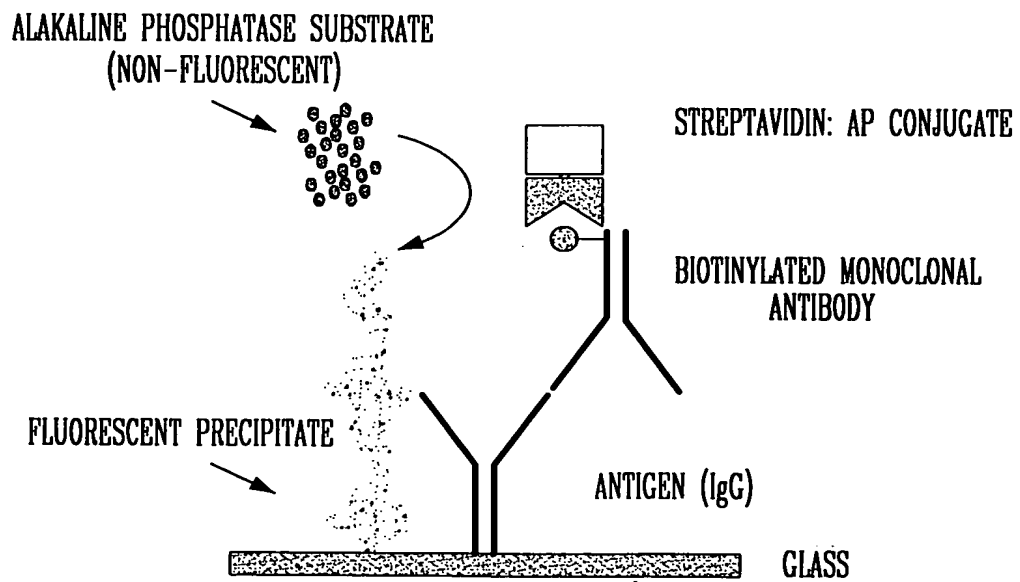


FIG. 26

Rapid Immunassay (Dipstick)

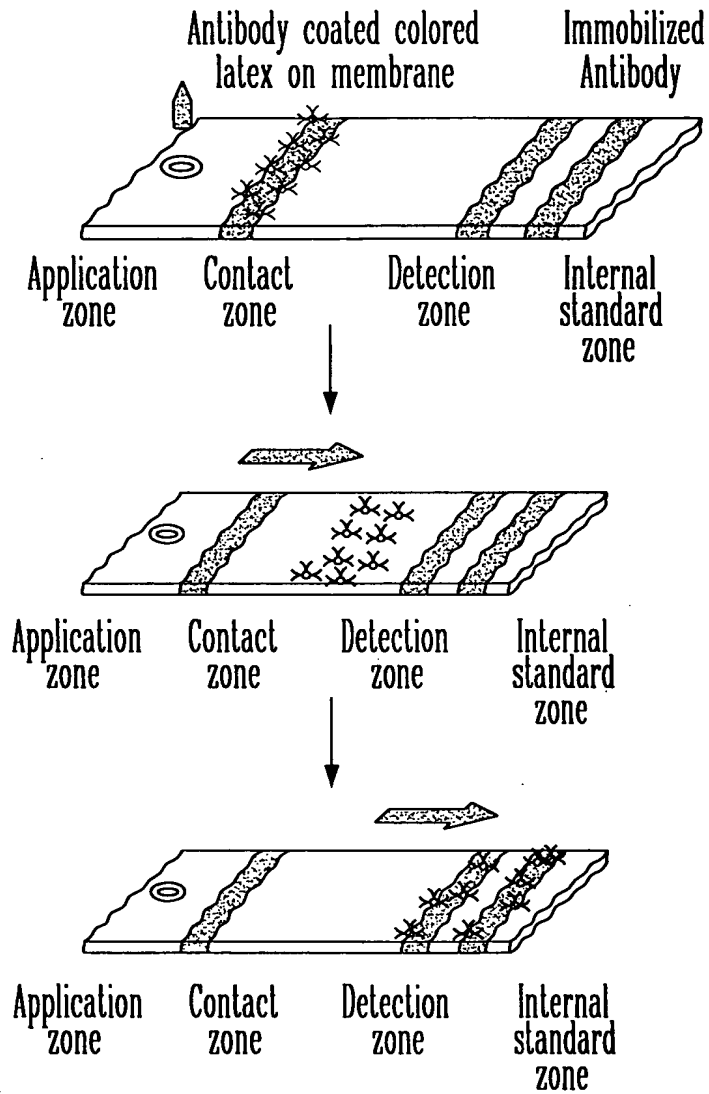
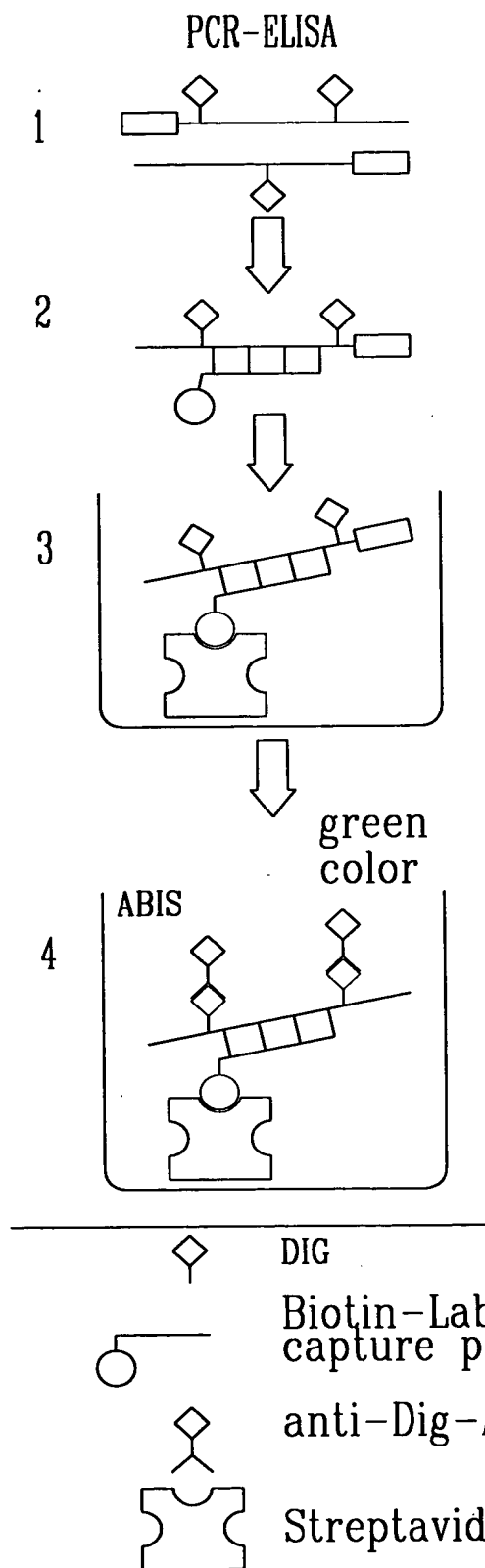
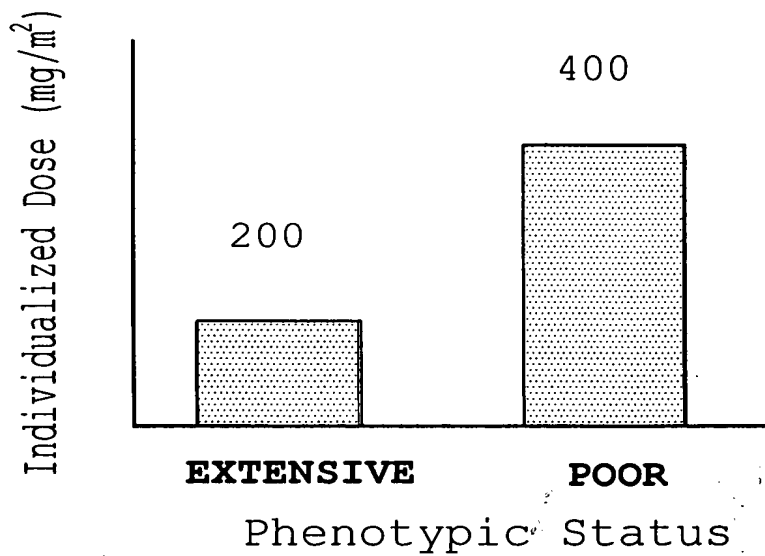
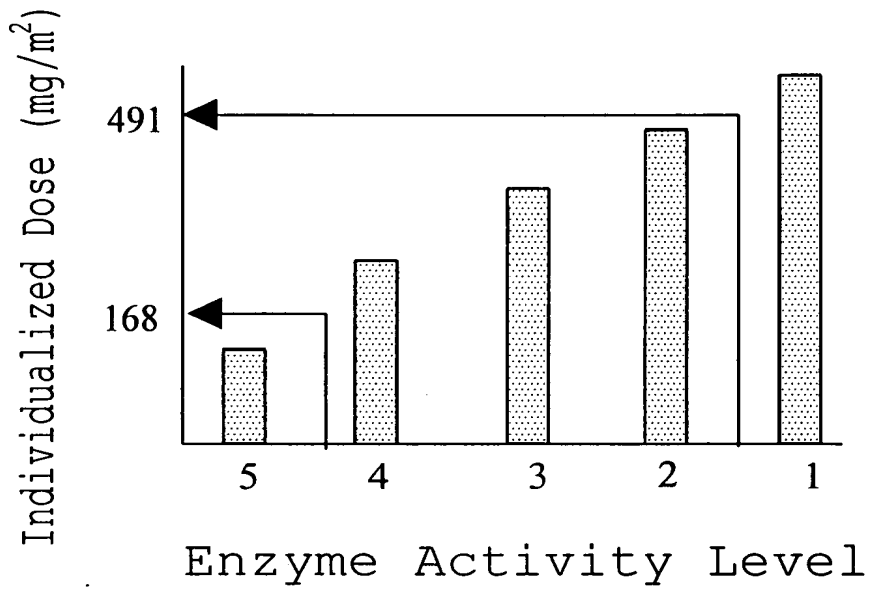


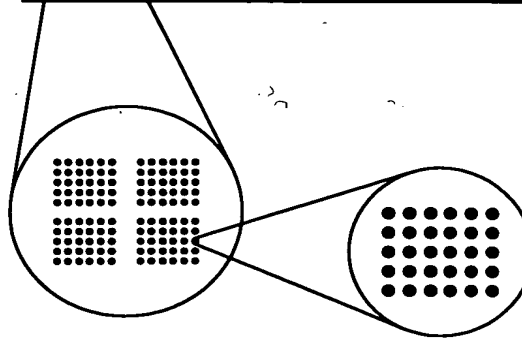
FIG. 27





96-WELL MICROARRAY PLATE

4 ARRAYS/WELL



SINGLE ARRAY

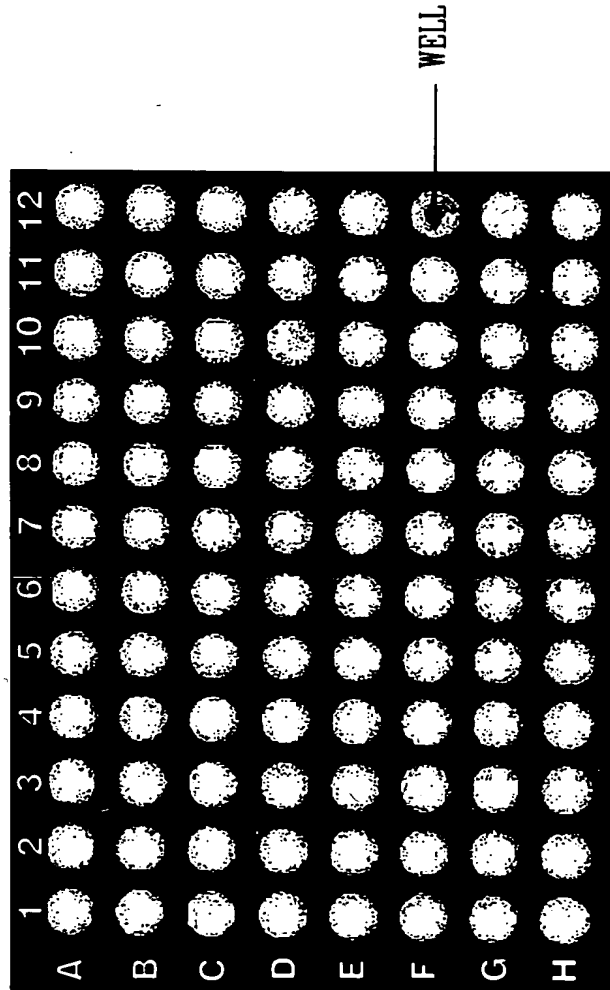


FIG. 23